

LOWER PAXTON TOWNSHIP ZONING HEARING BOARD

Meeting of April 23, 2015

Members Present

David Dowling
Jeff Staub
Sara Jane Cate
Greg Sirb
Alan Hansen
Watson Fisher

Also in Attendance

James Turner
Amanda Zerbe

Docket 1369

Mr. Turner noted that the Zoning Officer received an email from the applicate for Docket 1369, yesterday morning, and it stated that the applicant is certain that they want to withdraw their application.

Docket 1371

Applicant: Cellco Partnership d/b/a Verizon Wireless

Address: 4642 Jonestown Road, Suite 200
Harrisburg, Pennsylvania 17109

Property: 4041 Valley Road
Harrisburg, Pennsylvania 17112

Section 306.B.1.b

A Commercial Communication Antennae/Tower is not permitted in the R-1, Low Density Residential District

Section 402.A16.b(1), requirement that the antenna is setback a distance equal to its total height above the ground from any lot line of a dwelling on another lot.

Section 402.A.16.b(2)

A new tower, other than a tower on a lot of an emergency services station, shall be set back the following minimum distance from any existing dwelling: 300 feet plus the total height of the tower above the surrounding ground level.

Section 402.A.16.f, all accessory utility buildings or cabinets shall: have a maximum total floor area of 400 square feet, which may be divided among adjacent buildings serving separate companies,

have a maximum height of ten feet and meet principal building setbacks.

Section 111.G, after a variance is approved and is officially authorized, then any applicable zoning and building permits shall be secured by the applicant with 12 months after the date of such approval or authorization. The work authorized by zoning permits shall then be completed within 12 months after the issuance of the permits.

The Applicant wishes to construct a cell tower in the R-1, Low Density Zoning District at the property located at 4041 Valley Road.

Grounds:	Section 306, 402 and 111
Fees Paid:	March 27, 2015
Property Posted:	April 13, 2015
Advertisement:	Appeared in <u>The Patriot-News</u> on April 7, 2015 and April 14, 2015.

The hearing began at 7 p.m.

Mr. Dowling swore in Amanda Zerbe, Zoning and Planning Officer for Lower Paxton Township.

Mr. Dowling questioned in respect to Docket 1371, has it been properly advertised and posted. Ms. Zerbe answered that the applicant paid the fee on March 27, 2015 and it was posted on April 13, 2015 and advertised in The Patriot-News on April 7, 2015 and April 14, 2015.

Mr. Dowling requested Ms. Zerbe to provide a listing of the Township Ordinances that are at issue with this application.

Ms. Zerbe answered Section 306.B.1.b, A Commercial Communication Antennae/Tower is not permitted in the R-1, Low Density Residential District

Section 402.A16.b(1), requirement that the antenna is setback a distance equal to its total height above the ground from any lot line of a dwelling on another lot.

Section 402.A.16.b(2), A new tower, other than a tower on a lot of an emergency services station, shall be set back the following minimum distance from any existing dwelling: 300 feet plus the total height of the tower above the surrounding ground level.

Section 402.A.16.f, all accessory utility buildings or cabinets shall: have a maximum total floor area of 400 square feet, which may be divided among adjacent buildings serving separate companies, have a maximum height of ten feet and meet principal building setbacks.

Section 111.G, after a variance is approved and is officially authorized, then any applicable zoning and building permits shall be secured by the applicant with 12 months after the date of such approval or authorization. The work authorized by zoning permits shall then be completed with 12 months after the issuance of the permits.

The Applicant wishes to construct a cell tower in the R-1, Low Density Zoning District at the property located at 4041 Valley Road.

Mr. Dowling noted that there are five separate variance request with respect to this application. Ms. Zerbe answered yes.

Mr. Dowling requested Mr. Strong to have the witness's who are planning to provide testimony to stand. Mr. Dowling sworn in the witnesses who would later provide their identity at the time of their testimony.

Mr. Dowling requested Attorney Strong to provide testimony and to call his witnesses, and to keep in mind that this request is not something that the Board is unfamiliar with. He noted that the five variance requests are more than what he requested in the past for the cell towers.

Mr. James Strong, Attorney with McNees Wallace and Nurick, LLC, 100 Pine Street, Harrisburg, Pennsylvania, noted that he is representing the applicant, Cellco Partnership d/b/a Verizon Wireless. He noted that he understands that he Board is familiar with Cellco Partnership d/b/a Verizon Wireless as he was before the Board almost one year ago to the date for two other proposed tower facilities that Verizon Wireless proposed in the Township. He noted that he would like to tie in those two facilities in this discussion, explain where they are with those facilities, and then discuss the proposed facility.

Mr. Strong noted that the Township's Zoning Ordinance and Zoning Map have limited a new tower to three zoning districts in the Township. He noted that one is the Conservation District found in the northern portion of the Township. He noted that the second area is the General Industrial District that is found in the southwest area of the Township, and the third area is the Light Industrial District is found along Route 22 to the east of the Township.

Mr. Strong noted that he discussed last year how it was impossible to address some very real network concerns and objectives for the residential Township area by locating additional facilities in those portions of the Township. He noted that he has a proposed cell tower that should be going up soon in the General Industrial District, a co-location for an existing tower.

Mr. Strong noted that one of the two sites that he brought before the Zoning Board you last year is located at 900 South Arlington Avenue, the Prism Site within the Institutional District located along I-83, a proposed 80-foot tree pole. He noted that it is a tower disguised to look like a tree. He noted the second locations that he requested approval for last year was along I-81, the

Nantucket Site, located at 4951 Irene Drive. He noted that it is located in the R-1 District and is also an 80-foot tree pole.

Mr. Strong noted that the two applications were approved and both required use variances and dimensional variances related to set back requirements. He noted tonight he is looking for a variance request for the distance to the existing residential dwelling.

Mr. Strong noted that the proposed site before the Board is located adjacent to I-83 and it is also a tree-pole that is 90-feet tall. He noted that the height and design of the tower will allow it to blend in very well with the location for where it is proposed. He noted that the property is located at 4041 Valley Road and it is also zoned R-1, similar to the Irene Drive proposal.

Mr. Strong noted that it is very similar to the two towers that were approved last year. He explained that the overall site plan identified the perimeter boundaries for the property. He noted that there is an existing access to Valley Road that is paved and Verizon Wireless can use that access to access the proposed facility. He noted that the lease area is 60 feet by 60 feet and within that lease area; however, Verizon will be installed a 40 foot by 40 foot fenced compound and the proposed improvement will be located inside the fenced compound.

Mr. Strong noted that the tower is 90 feet tall with a five foot lighting rod so the overall height would be 95 feet. He noted that it will be a tree pole, disguised to look like a tree. He noted that these are designed in such a way that the branches come all the way down to a height of 40 feet above the ground level. He noted that many others only put branches at the top and it does not look like a tree.

Mr. Strong noted that landscaping will surround the fenced-in area, and inside the fence will be the tower, and Verizon Wireless equipment and a generator. He noted that this site is different than the other two in that instead of an equipment shelter, Verizon has proposed to install an equipment platform that is 12 feet by 20 feet, and the equipment cabinet will be installed on top of that. He noted that adjacent to it will be the generator that is only used as emergency backup in the event there is power outage to the area. He noted that Verizon is proposing a concealment structure that will enclose the generator, the equipment platform and cabinets and it will have a roof that is similar in design to other existing outbuildings on the property. He noted the existing house is near Valley Road and there are two sheds and a barn located on the property. He noted that the concealment structure will be designed to be compatible and of a similar appearance as the existing out buildings currently located on the property. He stated that he has pictures for the Board.

Mr. Strong noted that it will be a very unique facility noting that he has photo simulations for what it would look like from different perspectives and the surrounding area. He noted that it is adjacent to I-83, and a very unique installation from what was approved by the Board last year.

Mr. Strong explained that north is up on the aerial map showing the outbuildings. He noted that it is a much wooded area and there is a change in the topography. He explained that the ground elevation for where the tower would be constructed is 450 feet above sea level, and the house to the rear of the tower would be at 480 feet above sea level. He noted the topography

changes greatly south of the property, and the house to the rear is located on a dead-end road and there is an intervening parcel between the Valley Road property and the residential home to the south. He reported that there is no information available on this parcel from the tax office and no one knows who owns it. He noted, at one time, a road went back in that location but it is no longer in use. He explained that I-83 borders this to the west and Valley Road is to the north.

Mr. Strong explained that Wireless Verizon floats a balloon to the tallest height of the cell tower which would be 95 feet and takes photographs from different perspectives surrounding the properties, using the balloon in the picture in order to simulate and superimpose on the photo what the proposed tree pole would look like once it is constructed. He noted that is what this exhibit does, it provides an idea of what it will look like once it is approved and constructed. He noted that he has four different perspectives and will hand out smaller versions to the Board members.

Mr. Strong noted that the first photograph was taken from the west side of I-83 looking northeast towards the proposed facility. He noted that it is a much wooded area with many changes in topography and this type of facility will blend in very well. He noted the second photograph was taken immediately due south of the property and the house in the foreground in the house that is south of the property. He noted that the topography behind the house falls off quite a bit so once the tower is constructed that is all that you will see. He noted that the pictures have no foliage on the trees but he has a few Google Street View photographs that show the trees fully leaved, suggesting that the tower would disappear at that point.

Mr. Strong noted that the third perspective is taken from the residential area to the east, looking between two houses back toward the tower. He noted that there are no leaves on the trees, but this is all that would be visible from the tree pole. He noted that he also has a street view photo with the leaves on the trees. He suggested that you would not see it from that location. He noted that the last view is from the north looking south towards the property. He noted that is probably the most visible view from anywhere but it is disguised as a tree and will blend in with all the trees in the area. He noted that it works so well because it is a short tower as it is only 90 feet tall.

Mr. Strong noted that he would like to touch on the relief that is required. He noted that there would be more variances for this one, as there are four and the additional request for the time extension. He noted that similar to both applications that were approved last year, the use is not permitted so a variance is required to permit the use as there are only three districts in the Township that permit a cell tower.

Mr. Dowling questioned what is the date of the Ordinance that allowed cell towers in those three districts. Ms. Zerbe answered July 2006. Mr. Dowling noted that we had cell towers in 2006, this is now the third request for a cell tower that will require a variance. He noted that his overall fundamental concern is, the Board enacted the Ordinance and knew there would be cell towers, but yet they only designated three zones for the towers. He questioned if we are legislating where the towers will go in the Township and that is not the Zoning Hearing Board's function. He noted the Supervisors decided where the cell towers are allowed and he can't imagine that anytime a tower would go outside of those areas, a variance would be requested. He

noted that he is a little concerned that we have an ordinance that allows towers only in three places yet this is the third request for a tower that would require a variance. He noted that this tower is within a mile or two of the other two that were approved a year ago.

Mr. Strong noted that the radio frequency engineer would be the best one to address the relationship between the towers that were approved last year along I-81 at Irene Drive. Mr. Dowling noted that the tower near the Osteopathic Hospital is not that far from this site as well. He questioned what would it be in terms of mileage. He requested that engineer to scale both towers as the newly proposed tower seems to be in the middle of the two towers that were previously approved.

Mr. Strong noted in regards to the first part of Mr. Dowling statement, if you look at the three areas where the towers are permitted, the General and Light Industrial areas, if you are working on an ordinance that is where you would first consider putting this use as it would be compatible with uses found in those districts. He noted that they make up a very small percentage of the overall area in the Township. He noted that the Conservation District which is the side of the Mountain, the technology, the users, the equipment, everything has evolved so much in the last 15 years. He noted that initially, putting a site on a hilltop or a mountain was a good idea, putting a large tower and booming a large signal over a very large area as there weren't that many subscribers back then. He noted with the advent of the I-Phone, that is when everything started to explode and take off. He explained that there are so many users, noting back then not many people had cell phones, whereas now such a large percentage of the population not only has cell phones, but they have smart phones and they rely on them. He noted that the radio frequency engineer can speak to that for how many households are wireless only, with no land lines and what implications there are for 911 calls. He noted that the industry has changed so rapidly and in such profound ways that even back in 2006, when this concept was done, you may have addressed covering some of the larger areas but the reality is that you need to be along the interstates and this is the only coverage along the interstates, south of I-83 and north on I-81. He noted that you have two major interstates meet in the Township and it is primarily residential, institutional etc. along those interstates. He noted that other areas that are targeted are ones that have a denser population, primarily residential areas but also areas where people are coming together in larger populations.

Mr. Strong noted that one of the things that Verizon Wireless did around the Township was to sign a master lease agreement with the Township to develop small cell facilities in the Township. He noted that they are a single antenna that is attached to an existing structure, Township owned structures, light poles, traffic signal poles, and any other structure owned by the Township. He noted that those facilities will further supplement the network and all of this is being drive by smart phones and users demand for data. He noted that is what is driving the next phase of the network. He noted, in order to keep up with that, Verizon has to build additional facilities and supplement those facilities with the small cell towers. He noted that it is an opportunity for the Township as Verizon will be leasing all of those small cell locations from the Township. He noted that it will bring revenue to the Township and it all works together to bolster the network to keep up with the demand for users for data.

Mr. Strong noted that identifying these three areas, it will still not be enough as it won't allow the providers to be covered along the highway and denser areas. He noted that Verizon's existing sites, pointing to the sites on a map, noting that they are all providing service for Verizon Wireless. He noted in 2006, they were not recognizing where the uses were currently being deployed in the Township.

Mr. Strong noted that federal laws apply that municipalities can't prohibit or have the effect of prohibiting service. He noted when you start to look at areas where the network objectives are not met, it raises other issues as well. He noted that he doesn't see it as the Zoning Hearing Board legislating capacity or the prerogative of the Township, but it is that the Zoning Hearing Board grant departures from the ordinance to permit these.

Mr. Strong noted that the Township may decide they need to reexamine how they are permitting the use throughout the Township; but, in the short term, the Zoning Hearing Board has the authority to grant relief.

Mr. Dowling noted that rather than trying to amend the ordinance, the Supervisors thought, let the Zoning Board look at it on a case by case basis because to amend the ordinance, you almost have to allow them anywhere to grant the kind of coverage that Mr. Strong is suggesting. He noted if the Zoning Board looks at each particular application, maybe that is what the Board was thinking of.

Mr. Strong noted in terms of what Verizon Wireless is proposing, the two towers that were approved last year and with this one, they are right up against Interstates, small towers disguised as tree poles, noting that he is even disguising the facilities on the ground. He noted that it is a very unique solution for what is a very real network need for Verizon Wireless. He noted that we are looking at very creative solutions for the issue that we are facing.

Mr. Dowling noted that a year ago, you told this Board that the two towers were small towers, now this one is 95 feet, where does the small stop. Mr. Strong answered that most towers that he worked on from the mid 1990's, until a couple of years ago, were almost all 150 to 190 feet tall. He noted that it was a standard tower. He explained, anything 200 feet or above requires that you light them, so we typically stay under that height. He noted that anything below 100 feet would be considered a shorter tower. He noted that the two towers approved last year were 80 foot and were probably the shortest towers that he ever worked on. He noted that this one is a little higher due to the topography.

Mr. Dowling questioned if either of the two 80 foot towers have been built yet. Mr. Strong answered no, noting that the construction on the Irene Drive site started this week. He noted that the one along I-83, the Prism Center Site, PennDOT is doing road widening for I-83; so they approached Verizon Wireless because they wanted to ensure that when they do the road widening, their storm water facilities and our proposed storm water facilities work together as they did not want any conflicts. He noted that we met with PennDOT and adjusted what Verizon was doing to accommodate the widening of I-83. He noted that it added time to the construction schedule and we are finalizing the agreements for the storm water management plan. He noted that is what triggered the request for the last waiver request for extended time periods in the

ordinance. He noted, under the ordinance, you have 12 months to obtain the permits and get the construction done. He noted that he asked for that extension in the event other issues came up.

Mr. Dowling questioned how you can tell us that you need more service when the two towers are not even up and operating. Mr. Strong noted that the exhibits that were presented last year were forecasting what additional capacity would be gained by the network if those sites are constructed, and the same holds true for this site. He noted that it was included in the forecasted need for this site. He noted when we were here last year, even when this site is constructed and turned on, there are gaps in the system. He noted once this is constructed and turned on in the next couple of weeks, there will still be a gap in coverage in this area. He noted in addition to coverage there is also a capacity issue and the engineer can speak to this. He noted that the surrounding sites, there is so much demand on those sites that they are reaching their capacity level.

Ms. Cate questioned if the towers were higher would it help. Mr. Strong answered that he would have to defer to Mr. Petersohn for the answer to that question. He noted that we design them to have capacity to accommodate other carrier's antennas, so if AT&T Wireless has a need, they could attach to this tower. He noted that it is designed with capacity for two additional users. He noted that it could also be emergency service providers, but we design for what our needs are.

Mr. Strong noted that the first variance is for usage and the second, Section 402 A.16.b(1) requires that the average located distance equal to the overall height of the structure from all property lines. He noted that this facility is located to the rear of the property and he noted on the zoning plan the radius of the circle is 95 feet centered on the tower, so that is the required set back distance and he meets it for all property lines with the exception of the southern properties. He noted that it is a heavily wooded area with topography and no homes. Ms. Cate questioned if Mr. Strong stated, where they are building this no one owns the property. Mr. Strong answered that there is a strip of land that there is no record of anyone owning the land.

Ms. Cate questioned if you have spoken to any of the neighbors. Mr. Strong answered no.

Mr. Strong explained that the next variance is Section 402.A.16.b(2) noting that this variance was granted for the other application. He explained that the ordinance requires that the tower be located a distance equal to 300 feet plus the height of the tower from any existing residential dwelling. He noted that the large circle shown on the zoning map is centered on the tower and the radius of that circle is 395 feet. He noted that there are some dwellings that are located within the required distance from the tower. He noted that the nearest dwelling is 222 feet and from the pictures taken, these houses will hardly see the tower.

Mr. Strong noted the Section 402.A.16.f sets a maximum floor area and height limitations for the equipment structure. He noted that the maximum floor area permitted is 400 square feet and the equipment platform is 12 by 20 feet which would be 240 square feet but he is proposing a concealment structure and it is 17 feet by 35 feet. He noted if you look at the floor area of that structure, it would be 595 square feet. He noted that the idea behind doing the concealment structure is to totally disguise what is inside the building, and to look similar to the other

outbuildings on the property. He noted that there is a height limitation of ten feet for the roof and the proposed roof would be 12 feet. He noted if Verizon was to install its standard equipment shelter in the area he would not need any relief.

Mr. Strong noted that is what Verizon Wireless is proposing and the relief that he needs for this project.

Mr. Sirb questioned, for the last variance, what was the hardship. He noted that the property could not be developed for anything else for where it is located, and it is an easy way to put a tower in there, but he does not see the hardship for this property. Mr. Strong noted that the Irene Drive has a residential use on it and the variance from an existing dwelling was granted for that application for the distance between the tower and the property owner's dwelling for the property. He noted that the Irene Drive property and the Prism Site already have uses on them. He noted that Irene Drive is a residential use and the Prism location is the United Council of Churches property.

Mr. Sirb noted when it was against I-81, there was really nothing else that you could do there. He noted that you have to have a hardship when you ask for a variance and he does not see it other than you need coverage. Mr. Strong noted that the Irene Drive application, the distance from I-81 to that tower was approximately the same as the distance from I-83 to this tower. He noted in terms of the distance from the tower to the Interstate, they are both about 200 feet from the tower to the Interstate. He noted that both have existing residential use, and both are heavily wooded and there are changes in topography from I-83 up to the Irene Drive property. He noted that there is an increase of elevation but the only difference between the two properties would be that the Irene Drive property has a sound barrier as part of it located on the property. He noted when we looked at the relation between the distance from the tower to the Interstate, and look at the photo simulations and see how heavily wooded and vegetative it is, in terms of providing use, it is the ideal way to provide it. He noted that the hardship is also dictated by the Township Zoning Ordinance. Mr. Sirb questioned if the hardship is created by the variance. Mr. Strong answered the Zoning Ordinance.

Mr. Dowling suggested that the argument was persuasive with the first request but a little less so with the second request and it gets a little murky with the third request. Mr. Dowling questioned what are the distances from the Arlington proposed tower to this one in question tonight.

Mr. Andrew Petersohn, 3230 Waterstreet Road, Collegeville, Pennsylvania, noted that he is the Verizon Radio Frequency Design Representative. Mr. Dowling noted that you testified before, about a year ago. Mr. Petersohn noted that it is about a mile and a quarter from the Prism cell tower to the King George tower and to the Nantucket tower. He noted that it is almost exactly in the middle of the two towers. He noted that we are closer to existing facilities that we are to the two other recently approved facilities. Mr. Dowling noted if that is true, and if you have other sites besides these two, how is it a hardship. He noted that he has not seen cell towers this tight and it seems to be a pretty tight concentration. Mr. Petersohn answered that there is a tremendous amount of demand and it is driven by the land being residential and a lot of business uses, commercial uses and highways that split the area. He noted in order to meet the demand

Verizon Wireless has leverage its existing sites, noting that he went through this this last year when he made the presentation for that meeting and their need to acquire more spectrums and equipped them with the latest and greatest equipment as the 4GL equipment is in the existing facilities. He noted that he needs to make modifications to the facilities to handle more traffic, but once he exhausts all of those avenues to increase the ability to handle more traffic he only have the ability to build capacity sites in order to handle the demand. He noted that the demand has grown exponentially since 2006.

Mr. Dowling noted when you were before this Board a year ago did you feel, at that time, that you had a good idea of the growth pattern. Mr. Petersohn answered yes, noting that Verizon Wireless is constantly keeping track of the network statistics.

Mr. Dowling questioned if last year you provided yourself a cushion in projecting how the increase would occur. Mr. Petersohn answered that he thinks he understands where Mr. Dowling is going, for why we did not apply for the third site last year. Mr. Petersohn noted that we had this site planned at the time, if you go back and look at the exhibits from those two facilities, noting that he had a dot on the map stating that it was a proposed site. He noted that it was part of the overall plan for the area. Mr. Dowling stated that he did not remember that being part of the presentation. Mr. Petersohn noted that it was included in last year's plan, and it has been part of the overarching goal since the area was designed some time ago.

Mr. Dowling noted that this is what Mr. Petersohn stated during last year's meeting. "He questioned Mr. Petersohn where does it end and you said you don't know what for Verizon is proposing in the immediate area, these two facilities will address the foreseeable need for this area; however, if things keep growing the way they are growing as far as capacity demand, he can't say that within five or ten years we will need another facility somewhere in this general area". He noted here we are 12 months later. He noted at the time he was well aware of this location on the map. He suggested that when he was talking he was including that as well. Mr. Dowling noted that it was not his recollection. He noted that it may have been a dot on a map, but he did not recall that a third one was proposed in this area. Mr. Petersohn noted that it was on the map and he thought he made mention of it.

Mr. Turner questioned if there are any others on the map. Mr. Petersohn answered, not that he knows of, other than the small cells that Mr. Strong mentioned earlier, and there are seven for this plan. He noted that he had them mapped as well. He noted that the small cells are smaller and shorter but in all these cases they are to be attached to existing light service. He noted that they are not even noticeable with a single antenna site that is attached to the support structure of the existing traffic signal where there is a small cabinet that is attached to the base, typically off the ground. He noted that they are meant to help with traffic hot spots, along Jonestown Road where you have a lot of commercial uses.

Mr. Dowling questioned Mr. Petersohn, as an engineer, if he was able to determine how much the use of a tower comes from Interstate travel versus non-Interstate travel. Mr. Petersohn Answered, to a certain extent. Mr. Dowling questioned how much of the Irene Drive tower, when it is completed, will handle Interstate traffic. Mr. Petersohn answered that he did not know off the top of head. He noted that he would have to prepare answers for that.

Mr. Dowling noted the reason he asked was because the two that are proposed to be built are primarily built to handle interstate traffic, particularly I-81 gets a lot of through traffic. Mr. Petersohn noted that Irene Drive was more of a coverage site than either of the other two. He noted that we needed more coverage for data in that area. He explained that one of the functions in that site would be to fill that area along the Interstate whereas the Prism and King George sites are, in areas that already have easy coverage but they will increase site and building coverage going into a substantially built building like this one so that the service will follow you. He noted that the facility for tonight's discussion and the Prism Center are more capacity sites. He noted what we find is that most of the capacity demand is not coming from the Interstate. It is not as good as someone who is in a coffee shop. He noted that stationary folks generate the majority of demand. He noted that we do our best to put them where they will have the least impact to the general public although they are not permitted in the R-1 District.

Mr. Sirb noted if you only have coverage in the designated areas would there be coverage in Lower Paxton Township. Mr. Petersohn answered if we were back ten to 15 years ago when towers were built to 300 feet, and everyone had a bag phone and we were only doing voice tract which has a lot less threshold for signal strength. He noted that we could provide coverage, 1990's style coverage using a car kit phone. He noted that today's phones are ten times more powerful today. He noted that a tower could serve you three miles away as it was up on a mountain top and it could blast power, but today the answer is no, not in the way that today's subscribers would find to be acceptable.

Mr. Sirb noted if we say no to a variance, and the Township does not have adequate coverage, having a number of drop offs, or it is slow, and we can't get the quick service we are used to, the residents will be calling the Township to find out what is wrong. He noted that it is an ongoing every year issue, noting that it is not a variance anymore, it is almost, it has to be done, and you have to pick the spot that is the least intrusive.

Mr. Strong noted for Spring Garden Township, this ties into ordinances that were adopted and now are being applied to what is a rapidly involving industry. He noted that we discussed the small cell facilities with a single antenna, but what Verizon was proposing was a small antenna site on a golf club property. He noted that there is an existing stone shack and they are proposing one antenna to go on the roof, using a radio frequency copula, with the antenna inside it and you would never know it was there. He noted that under the ordinance it is a use variance, so we end up with a polar struggle between ordinances that were adopted 10 to 15 years ago, having no idea how this technology would evolve and what the deployment would require, noting that it is a more extreme example of what we are talking about tonight. He noted that in terms of applicability of those types of ordinances to what is currently being proposed, you have the absolute ideal type of installation, yet you are being held to a use variance. He noted to do a tree pole is much more expensive than to do a standard mono-pole. He noted to do the concealment structure is much more expensive than doing a standard equipment shelter. He noted that it will be a very expensive installation, more than the other two that were approved last year. He explained, in trying to find a way to make it work to make it compatible with the surrounding area when it is constructed, most people will never know it is there.

Mr. Sirb questioned Mr. Strong if in his opinion this is the least intrusive area to get the job done. He questioned if it won't change the characteristic of the neighborhood, people won't see it, in your opinion; it is the least instructive for building in the neighborhood. Mr. Strong answered yes but the one exception to that would be the site on Irene Drive that is probably even less intrusive due to the sound barrier as it is located up on the hill, at an interchange of two Interstates. He noted with the tree pole and the topography and the surrounding trees he would say that most people would never notice that it is there as opposed to a 150 or 180 foot mono-pole. He noted that Verizon has a tree pole in the Penbrook maintenance yard. He noted that most of the time you would not know that it is there. He noted that there are no woods around that one and it doesn't have trees around it; whereas the Irene Drive one, and this one given the topography and all the existing trees that are there, you will probably never see it.

Mr. Strong distributed pictures taken from Google Earth showing where the tower will be located noting you can see the existing woods. He noted that it is a photo-simulation. Mr. Turner questioned if the pictures were numbered. Mr. Strong answered no but he could do that and make them exhibits.

Mr. Strong distributed the other exhibits. Mr. Staub noted from what he remembered from the two applications submitted last year, there was only one residential structure affected by the proposal. Mr. Strong noted for the Arlington Avenue, that residence was 331 feet to the northeast. He noted that it is an open field but for this application it is a heavily wooded area and the other photograph that he had showed street views with all the trees in the area from Kimbers Road.

Mr. Staub noted that the point that he wanted to make in comparing those applications to this one is, by his count, this proposal will impact the home on the east side as well as nine other homes and part of the apartment building on the north side of Valley Road. He noted, when he voted last year to grant the variance there was going to be a minimal impact on the neighbors but this is not a minimal impact, noting that it is essentially in the middle of a residential neighborhood, a planned development. He noted that the west side is adjacent to the interstate. He noted that he drove out there and it does not seem to be a good fit.

Mr. Strong noted that the larger radius circle is 395 foot, noting that there are residential dwellings located within that circle. He noted that when you look at a flat piece of paper it looks like it is more dramatic then he would submit that it is. He noted if you look at the photo simulations, and if you look at the houses that you are talking about, the nearest house is 222 feet away. He showed what the towers looked like without any leaves on the trees, and marked that picture as Exhibit A-15. He noted that it is the same view looking between those two houses when the leaves are on the trees. He noted with no leaves you can barely see the evergreen looking structure. He stated that is the closest residential home and when the leaves are on the trees you won't see it and when the leaves are off the tree that is all you will see. He noted in terms of impact, the overall height of the tower, topography for the area, and the fact that it is going to be a tree pole, when we talk about the surrounding properties for the most part, they will not see it. He explained, to the south, it is 236 feet to the nearest dwelling, as shown on Exhibit A-16. He noted that it is located on a dead-end road. He noted that a second photograph is

looking back in the same direction but with leaves on the tree. He noted that is the nearest structures you will see.

Mr. Strong noted that Exhibit A-17 is taken from the driveway stub located on that dead-end street. He noted that there is a guard rail at the end of the road with a barrier and signage. He explained, that driveway stub comes off that road. He noted that it is all wooded north of this and the topography falls off as you go back towards the tower location.

Mr. Strong noted that Exhibit A-18...

Mr. Sirb questioned when you put this in an R-1 District, Mr. Strong's thinking is if you can't see it then it is a good thing and the least impact. Mr. Strong answered yes. He noted if the land was all flat and it was wooded and we were using a 195 foot mono pole that was not disguised and a house was 220 feet away, it would look like a very tall tower and you will see it. He noted that the idea is to make them as invisible as possible and as minimally intrusive as possible.

Mr. Staub noted that Mr. Strong mention the difference between Valley Road, where it accesses the property and the elevation where the cell tower would be. He noted that there was a 30 foot difference from the cell tower to Ridgeview Drive. Mr. Strong answered that he does not know the difference to that specifically as he only has contours for other areas on the plan. He noted that there is some slope from the tower but he does not have those figures. Mr. Strong noted that it looks like there is a grade. Mr. Staub noted that it slopes up to the south from Valley Road. Mr. Strong noted that the more dramatic slope is to the rear as the house to the south has a 30 foot difference.

Mr. Staub noted that he tried to picture what the cell tower would look like when he was at the site, back in the corner to the rear of the property and it seemed to him that the 95 foot tower would be much higher than the trees, given that the existing trees on the plan, are very mature and tall. He noted that he did not get the sense that they were 90 feet tall. He suggested that the illustrations that you showed in the exhibit, the tower seems to be much lower than the tree tops. He noted that it does not make sense to him. Mr. Turner noted if you are standing on a street looking at a 40 foot tall tree and another 200 feet behind the 40 foot tree is a 90 foot pole, you won't see the pole but that doesn't mean that the pole isn't taller than the tree that is obscuring the view. Mr. Staub noted that he was trying to adjust that when he was on site.

Mr. Strong noted that is why the simulations pictures are so helpful as they are the most accurate way to depict what it would look like. He noted that you don't see the balloon that was floated up to the height of the tower as it was replaced with the simulation of the tower. He noted that they will physically fly an orange balloon to the height and they know how tall it is, and in the picture they are not making any assumptions or scaling it, that is the height of the tower.

Mr. Strong noted if we are looking at this as if it was flat, there would be more impact, but given the wooded area, showing the aerial with the trees and all the leaves on it, it is a very

heavily wooded area and with the topography, the representative views show that the tree pole will not stand out at all. He noted that only one house will have more of a direct view than any of the others within 395 feet of the facility.

Mr. Hansen questioned what other sites have you looked at in the area. Mr. Strong stated that he would have Mr. Andrew Thompson, Site Acquisition Consultant, Unified Business Technology answer that question. Mr. Thompson noted that he was not part of the process as his predecessor acquired the site, who has since retired. He noted that he is the current project manager for this site and was not involved in the acquisition for this site. He noted in his previous employment for AT&T, he looked at the same area and across I-83, where the movie theater and Susquehanna Marketplace are located, and other property in that vicinity and there was not enough room.

Mr. Hansen questioned what was wrong with the west side of I-83 where there are no residential homes. Mr. Thompson noted that no one was interested in selling their land. Mr. Hansen noted that you were not able to purchase any other property. Mr. Thompson stated that is what he was told.

Mr. Strong noted that Verizon Wireless leases the land. Mr. Hansen noted that it would be better to lease it where there are no homes. Mr. Strong noted that you have to have the property owner lease you the land.

Mr. Sirb noted that you need a variance for where you are supposed to build, so if that doesn't work you won't have coverage. He noted that you need to find the least intrusive area so no one can see it, but it doesn't work because you have to find a property owner to lease the property. He noted that you get boxed into X and this is it and you have to deal with whatever X is. He noted that you have a property owner who says it is okay and you hope that it is not intrusive.

Mr. Strong noted that we are limited in terms of what Verizon Wireless will say that this is the geographical area where we need a new facility to address the network needs and yes we have to look for willing property owners, we look at underlying zoning districts, at how large the property is, and all the other factors. He stated to Mr. Sirb that this is the least intrusive solution. He noted that the photo-simulations for the area, when it is constructed, will blend in with everything that is there and will be a very least-intrusive type of installation. He noted under federal law that is what you look at. He noted if you have a gap in coverage, a need to fulfill, you also have to look at meeting the need in the least intrusive way possible, so he would submit that this really is a least intrusive means of addressing the network objective. He noted that you won't see it once it is constructed.

Mr. Sirb questioned Mr. Strong if he found no property owner that would lease to you, and you had a gap in coverage, and you are receiving complaints, under the federal law, can you take a property. Mr. Strong answered that Verizon does not have the power of eminent domain. He noted that it is out of Verizon's control, noting that the federal regulations place limitations on what municipalities can do through their zoning. He noted that municipalities can't prohibit or have the effect of prohibiting the provision of service or unreasonably discriminate between

service providers. He noted if someone has a tower and another vendor comes in to state that they also have a need, the municipality cannot discriminate between the two. He noted that is regulating and restricting by municipalities. He noted that there is nothing that requires a property owner to lease ground to a wireless service provider. He noted if you have an interchange here and everyone within a mile of the interchange refuse to lease to Verizon, you would not have an option. He stated that he heard that Google is proposing to float balloons in certain areas.

Mr. Dowling questioned Mr. Strong is there is anything else he would like to present. Mr. Strong answered that he has 14 exhibits and he would defer to the wishes of the Board as he can walk through and identify what they exhibits are. He noted that we talked about several at length and he can ask the witnesses if everything that he has presented is accurate or hear testimony from all the witnesses.

Mr. Strong noted that you have heard from Mr. Petersohn, the radio frequency engineer and from Mr. Thompson, the site acquisition consultant. He noted that he has Frank Chlebnikow from Rettew who prepared many of the exhibits, and Bruce Stegman is a structural engineer who provided testimony last year.

Mr. Dowling noted that the Board doesn't have a concern that the structure won't be sound, or with licensing, condition analysis, electromagnetic emissions analysis, interference analysis, FHA screening, aviation screening, and structural letter. He noted that he sees it as a question of the overall use variance. He noted that he is not saying that the distance from the homes are not an issue, noting that the smaller circle is more of an issue. He noted that the Board has to look at this with the two that were granted a year ago. He noted that he is looking at those to determine if there is really a hardship, noting that it is in an R-1 zone.

Mr. Sirb questioned since we are impacting nine homes, is there an emission analysis or anything else that would impact the neighbors. Mr. Strong noted that it is all contained in his 14 exhibits. He noted that Mr. Dowling stated that we don't need to spend a lot of time going through all the documents.

Mr. Strong noted that he would briefly described all 14 documents. He noted:

- Exhibit A1- Zoning Authorization Letter,
- Exhibit A2 – Zoning Plan,
- Exhibit A3 – Aerial Exhibit,
- Exhibit A4 – Zoning Map,
- Exhibit A5 – Written Description of Tower Collocations Policies,
- Exhibit A6 – Photo Simulations,
- Exhibit A7- Generator Sound Study,
- Exhibit A8- Radio Frequency Design Analysis,
- Exhibit A9 – FCC Licenses,
- Exhibit A10 – Electromagnetic Emissions Analysis,
- Exhibit A11 – Interference Analysis
- Exhibit A12 – FAA Screening

Exhibit A13- PA Bureau of Aviation Screening
Exhibit A14 – Structural Letter.

Mr. Strong noted that Exhibits A15 through A18 are the Google images that he provided to the Board. He noted those are all the exhibits.

Mr. Strong noted that the exhibits provided by Mr. Petersohn last year for the last two applications, for the Irene Drive facility, noting that area in the green oval was the area of need and the white area showed the lack of coverage, with the yellow area showing coverage, and that was the area intended to be addressed. He noted that it was not just I-81 as you can see from the footprint, noting that the green area shows towers built, antennas turned on and that is the coverage that is expected. He noted that it goes into a number of residential areas surrounding there, not just I-81 but it does provide the coverage along I-81. He noted that the area of white to the south is right around the area where the new site is proposed. He noted even with the proposed site built and turned on, there are still coverage needs in the area.

Ms. Cate questioned if you will need another tower. Mr. Strong noted that it is an area where they will potentially need to provide some service, but how they would do that, it is beyond the Township boundary. He noted that it is coverage that they are actively trying to provide.

Mr. Strong noted the Exhibit A8 for the Arlington Avenue project identified a proposed location, two proposed sites, one at the Briarsdale site, in the Light Industrial District and then the King George proposed site, the one before you tonight. He noted, all of that was factored in when these options were being designed to address the network. He noted that the cost to build a new tower facility is very expensive and if there was an option for Verizon Wireless to co-locate their antennas on existing structures to deal with their objectives, that would be the cheapest way to do it and it would be the fastest way to the market. He noted that Pennsylvania has a Wireless Co-location Act that says that municipalities must approve co-locations as long as you are not substantially changing the structure, but that was not an option here. He noted that it won't work where we are permitted for use in the Township and what he is proposing is a very least instructive means of addressing the need, but very expensive. He noted not only are we proposing a tower facility, but a tree pole which adds significantly to the cost of the tower and in addition to that, we are proposing the concealment structure that also is going to add significant costs to overall site. He noted that it is not something that Verizon Wireless does at whim, these sites are typically planned and we are engaged in the leasing, zoning, permitting, and stormwater management improvement processes and it can take a year to a year and a half to from the time you identify an area of need to actually constructing a tower and getting it on air. He noted that it is a very long process, with a heavy investment and it is only taken when they have a very legitimate need.

Mr. Strong noted that Verizon Wireless needs this tower in addition to the two towers that were approved last year.

Mr. Sirb questioned if you are not granted this variance what would be the effect, would the service not be as good or dropped.

Mr. Strong requested Mr. Petersohn to address this question. Mr. Petersohn answered on page two of the design report, CISCO had published information for what the network providers are up against. He noted that CISCO publishes a projection every year for wireless data growth and they are predicting a 57% compound annual growth rate for the next five years which results in an increase ten-fold for wireless data. He noted to provide how big a number this is, in 2014, there were 2.5 EB, and in 2012, the number was 885 PB, which is 10 to the 15th bits, 10 to the 9th is a GB and 10 to the 6th is a MG. He noted in 2010 we were 237 PB. And in 2000 we were at 75 PB.

Mr. Dowling questioned if this was in Lower Paxton Township. Mr. Petersohn answered that it is world-wide.

Mr. Sirb requested Mr. Petersohn to stick with Lower Paxton Township and he questioned if you don't get the variance what's the problem. Mr. Petersohn answered that once the sites that serve the area exhausts its capacity, which is predicted through Verizon's statistical model that it will happen the end of this year, many of the facilities serving the area will be exhausted regularly. He noted that initially data speed will slow down, so downloading a business attachment on an email may take a little longer. He noted that it may take longer to send a text message, noting anything that involves data sessions will initially take longer. He noted that the demand is not slowing down, it is increasing.

Mr. Dowling questioned how you can make a projection for this area of the Township when two towers within a mile of this are not even up and operational. Mr. Petersohn noted that we are projecting all of the sectors on the surrounding sites. He noted if you look at where this facility is proposed to be, in relation to the Nantucket one on Irene Drive, the way they are orientated is that three sectors in antennas, three arrays that point in different directions and focus their information off to Verizon. He noted that the Nantucket site is orientated north, and it will offload the facility for I-81 and I-83, the northeastern basic sector of that site and also for the Colonial Park sector, but it won't do much for the southeastern sector of I-81 and I-83. He noted that is one of the main targets for the proposed site.

Mr. Dowling questioned if you could project the antenna to do that. Mr. Petersohn noted that he will have antennas on the Nantucket site that will face three areas providing 180 degree service. Mr. Dowling questioned if it could get down to the King George site. Mr. Petersohn answered that it won't get down far enough.

Mr. Staub questioned what would happen if the Nantucket Tower was five feet higher. Mr. Petersohn answered that it would not offer the coverage. He noted if we could built it 100 feet higher and get it into that area, we would not want to as we are projecting enough growth on this sector so the southeasterly sector of I81/83 and the westerly facing sector of Colonial Park, we will need a site just to absorb just that growth. He noted that we are projecting growth on the northerly facing sector of Colonial Park and the northeasterly facing sector of I-81/83 to require another site.

Mr. Dowling noted that the King Georg site is projected growth. He noted that he remembered when Mr. Petersohn testified for the Arlington Avenue site that it would project up

to I-81 and there was no mention of the King George site and there was no blackout area where the King George site is when we looked at this a year ago, an area where there was no coverage.

Mr. Dowling questioned if there is coverage along I-83 where the King George site is proposed. Mr. Petersohn answered that there is on-street coverage, in-vehicle coverage and some in-building coverage. Mr. Dowling questioned if you covered every place in the Township. Mr. Petersohn answered that we have a pretty mature network now, but up to the north near the Nantucket site there are some gaps for the in-vehicle coverage along the interstate and that was one of the components for this. He noted that this facility is meant to cover capacity issues.

Mr. Dowling questioned when cell towers will be obsolete. He noted that he read an article that in ten years they will be obsolete. Mr. Petersohn disagreed with that statement as he has seen nothing to lead him to believe that. Mr. Dowling noted that the article said that each phone would be its own cell tower.

Mr. Strong requested Mr. Petersohn to speak to thresholds for in-car versus in-building. He noted that many households are wireless only and he questioned why is it important to have in-building coverage with respect to 911 calls and also in your report you discuss the sectors for the surrounding sites project to reach capacity by the middle of this year.

Mr. Petersohn noted that when he mentioned that we were at 24.3 EB of data by the year 2019, he noted that an EB is more words that have ever been spoken in human history.

Mr. Petersohn noted that the Center for Disease Control noted as the first day of 2014, 44% of the American homes only have wireless, now the number is more than half of the homes with adults 18 to 24 are going to wireless. He noted to those folks who don't have a landline their cell phone is there only means of communication. Ms. Cate questioned if the landlines will go away. Mr. Petersohn answered no. He noted that the wireless substitution will continue to grow. Ms. Cate noted that many people have a cell phone and a wireless phone. Mr. Petersohn noted that he has a landline but he doesn't use it much.

Mr. Petersohn noted with the exhaustion, the data speed will slow down and it will get worse until it becomes a chronic slowdown of services. He noted that it will have an affect on the casual use of the network and for mission critical uses as well, noting that 911 calls will only work until the capacity is exhausted. He noted that the 911 call may not go through. He noted when the dispatch receives the phone call they will not be able to identify the location.

Mr. Staub noted at the expense of someone watching a video on their iPad, the emergency call will not go through. Mr. Petersohn answered that a police cruiser who has someone pulled over and is attempting to check the license plate before they approach the driver... Mr. Dowling questioned if we have any record of that occurring in the Township. Mr. Petersohn answered that he did not know of any instances but he knows that it has occurred elsewhere. He noted that the network does not know the difference between a 911 call from a regular call. He noted, the middle of this year is when capacity exhaustion is expected.

Mr. Dowling noted if that is true, why you said at the last hearings that it was five to ten years out. Mr. Petersohn answered that his testimony was that he can't say beyond five to ten years that he would be here again. Mr. Dowling answered that was correct. Mr. Petersohn noted that Verizon does not project out beyond a couple of years and that was all he meant last year.

Mr. Strong noted that Mr. Petersohn testified that this site was already planned. Mr. Petersohn answered that this site was already planned at the time he testified last year.

Mr. Dowling suggested that the Board understands and he questioned if anyone in the audience wished to be heard on this application. Mr. Strong noted that is Mr. Staub's point in terms of impact on nine residential dwellings that no one is here. Mr. Dowling noted that is true and a factor but it is due to the adequacy of our notification and posting system which is something he complained about forever. He noted that an 8 x 11 piece of paper on a telephone pole, when it is 40 degrees out, doesn't make sense. He noted that no one is here to defend it.

Mr. Dowling noted that the Board has 45 days to render a decision and he questioned if any member of the Board wished to make a motion on Docket 1371.

Mr. Sirb noted for the last variance that Mr. Strong asked for, about the work completion of 12 months, is there a time frame that you want. Mr. Strong noted that the purpose is to provide some cushion. He noted that the ordinance says that within 12 months of the approval you have to pull the permits and with 12 months of pulling the permits you have to complete construction. He noted the Prism tower on Arlington Avenue is a good example where we did not realize that we were going to have to deal with the I-83 widening project and PennDOT's stormwater facilities interacting with their proposed stormwater activities. He noted that we worked through that process and the Township cooperative with us.

Mr. Sirb questioned if it should be 18 months, 24 months. Mr. Strong suggested that 18 months is fine and 12 is probably fine. He noted it is not critical but we are looking for a little bit of flexibility because we don't know what we run into for the permitting process. Mr. Sirb noted that you would want that the building permit shall be secured by the applicant by 18 months. Mr. Strong answered that would be fine. He noted once we have all our permits then we are ready to go. He noted that 18 months would be good with no extension on the 12 months to build would be fine.

Mr. Dowling noted that he does not see an issue with that. He noted that is the least troubling of all the requests. He noted that the biggest problem is with Section 306.B.1.B, that it is not a permitted use in the R-1 District. He noted the hardship is the issue. Mr. Sirb noted that there is no hardship for a cell tower as it is an issue of supply and demand. He noted that it has to be done or at some point you will not have service or what you are used to. He noted that there is no hardship and that is why it is very difficult for him.

Mr. Dowling suggested that there could be a hardship if there were no cell towers anywhere in the Township other than in the three zones where it is allowed. He noted that is what he said an hour and a half ago. He noted if that were the case then there would be a good argument for a hardship as it would be inadequate coverage or no coverage in certain areas. He

noted that you are almost saturated, beyond saturation in coverage. He noted that he is not sure that it makes it a hardship or not.

Mr. Sirb noted that the hardship is slower and slower service.

Mr. Strong noted that Mr. Petersohn stated that the initial effect of the exhaustion would be a slowdown in the speed, so when you are downloading an attachment to an email it sits there and buffers and doesn't download immediately. He noted that is the first symptom, and the second symptom is that when you have exhaustion, a call does not go through at all and the coverage footprint then shrinks. He noted if someone is driving along I-83 and see a bad accident and try to call 911 and they can't get through, that is a significant issue. He noted if the proposed site is built and constructed, and someone is driving along I-83 and sees an accident and calls, 911 will know exactly where they are. He noted that it could be someone from Maryland driving through the Township who sees an accident, but they may not know where they are but they can call 911, and the location will be noted.

Mr. Sirb noted that he gets that point but he questioned if it is a scare-tactic, maybe, but he does not know, but he is not taking that chance. He noted as a Zoning Board member he is not taking that chance.

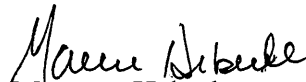
Mr. Sirb made a motion to approve Docket 1371 as submitted with the variance that the building permit shall be secured by the applicant within 18 months and that the work will be completed within 12 months. Ms. Cate seconded the motion.

Mr. Sirb noted that there is no hardship and we will continue to go through this every year. Mr. Dowling questioned why the Zoning Hearing Board should continue to go through this every year. He noted every year Verizon or someone else can come back and say, in five years you will have a problem, with slower calls. Mr. Sirb noted that he hopes that the technology can keep up and sometime in the future the cell towers won't need to be as big or as many. He noted at this time, this is the best that we can do and they had a landowner who is willing to lease the land, it is not the ideal situation and probably the least intrusive that we can get. He noted that he does not like that it is in an R-1 District but he is not willing to take that chance as a Zoning Board member.

Mr. Dowling requested Mr. Turner to conduct a roll call vote: Mr. Hansen, nay; Mr. Staub, nay; Mr. Sirb, aye; Mrs. Cate, aye; and Mr. Dowling, nay. Mr. Dowling noted that the application was denied.

The hearing ended at 8:50 p.m.

Respectfully submitted,


Maureen Heberle
Recording Secretary